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THE KINSHIP OF E. H. MOORE AND R. L. MOORE

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Summary

Evidence is presented that E. H. Moore and R. L. Moore were seventh cousins.

A history of American Mathematics would devote considerable attention to Eliakim Hastings Moore (1862-1932) who organized the Department of Mathematics of the University of Chicago at its founding in 1892 and who served as departmental chairman for many years [Bliss 1934; Bliss and Dickson 1935]. Also included would be Robert Lee Moore (1882-1974), his method of teaching (called the "Texas" method by some), and the mathematical achievements of his pupils [Wilder 1976; In Memorium 1975].

Perhaps many have asked whether or not E. H. Moore and R. L. Moore were related. For their respective methods for conducting classes, the scope and range of their respective research areas, and some personal characteristics of each showed that they were, at least, mathematical and perhaps philosophical kinsmen. Also, E. H. discovered a redundancy in the formulation of Hilbert's axioms for geometry and published this in 1902 [Moore, E. H., 1902a]. At the same time, R. L., while still a student at the University of Texas, independently made the same discovery. His proof was written up and published in the same year by his teacher G. B. Halsted [1902], giving full credit to R. L. Incidentally, E. H. expressed a preference for R. L.'s proof, calling it "delightfully simple" [Moore, E. H., 1902b, especially p. 153]. It is no wonder that when R. L. Moore applied for admission to the University of Chicago in 1903 he was accepted and thus became one of E. H. Moore's pupils. At that time (1903) it would appear that neither E. H. nor R. L. knew of their kinship. Indeed, R. L. later stated to several of his brothers that he and E. H. were not kin.

Late in life R. L. became interested in his genealogy and he began reconstructing his family tree. He consulted many books, and bought quite a few, among them certain New England township histories and "family" histories. In 1958, a great niece, Patricia Moore, visited his home, and R. L. showed her some details in his genealogical materials. He told her that he had found a family tie with E. H. Indeed, R. L. believed very strongly in genetic inheritance, and he told his young great-niece, "It is my belief that all great mathematicians are

related and they should be *required* to document their lineage." Many people who know of R. L.'s strong convictions about individual liberties and freedom of action will find it difficult to accept the word "required" above, but so Patricia Moore reports in a letter [Moore, P., 1975].

R. L. Moore's paternal family tree, as far as his ancestors named Moore are concerned, starts with a certain John Moore who settled in Sudbury, Massachusetts prior to 1642 and married Elizabeth Whale. R. L. was in the eight generation of males named Moore. His researches also turned up a kinship tie with Josiah Willard Gibbs, the famous mathematical physicist, with Gardiner Cowles, the economist, and a distant connection with President Grover Cleveland, all on the paternal side. On the maternal side he was related to Presidents James Madison and Zachary Taylor.

When the University of Texas at Austin faculty document "In Memorium" appeared it was stated that R. L. studied "in Chicago ... under E. H. Moore (not a kinsman)" [In Memorium 1975]. A copy was sent to Dr. Patricia Moore. She recalled her 1958 visit in R. L.'s home and wrote the author [Moore, P. 1975].

Recently a single sheet of paper was located among the many loose sheets in R. L.'s genealogical papers. This is undoubtedly in R. L.'s handwriting of his later years, and it shows a line of descent to E. H. Moore in the eight generation from a John Moore who settled in Sudbury, Massachusetts prior to 1642 and who married Elizabeth Whale. Granting the authenticity of R. L.'s researches and the fact that there probably was but one couple with names John Moore and Elizabeth Whale Moore living in Sudbury, Massachusetts circa 1642, a comparison of the ancestral lines indicates that E. H. and R. L. were seventh cousins.

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GAUSS BICENTENNIAL CELEBRATION AT GÖTTINGEN

On 16 January 1977, on the occasion of the opening of a Gauss bicentennial exhibition at the Göttingen City Museum, Professor Dr. F. Schmeidler of Munich spoke in the Göttingen University Aula on "C. F. Gauss and natural science in the nineteenth century". There followed an introduction to the exhibit by Professor Dr. M. Siebert of Göttingen University.

CANADIAN SOCIETY MEETING AND GAUSS SYMPOSIUM

The CSHPM/SCHPM is meeting on June 2 at McMaster Universi ty, Hamilton, Ontario. The program includes an invited lecture by J. Dieudonné, contributed papers and a business meeting.

The Gauss Bicentennial Symposium will take place on the following two days, 3 and 4 June, at the Ontario Science Centre in nearby Toronto. (See *Historia Mathematica* 3, 448).